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Zoning Board of Appeals



00 GROVE ST. | WORCESTER, MA 01605

508-856-0321

gravesengineering con

30 Providence Road Grafton, MA 01519

Town of Grafton

Zoning Board of Appeals

April 6, 2021

Subject:

Elmrock Estates, 21 Wheeler Road

Updated Engineer's Opinion Construction Budget

Erosion Control, Site Stabilization & Interim Stormwater Management

Dear Board Members:

Per the request of the Applicant, Graves Engineering, Inc. (GEI) calculated an updated engineer's opinion construction budget as required by Condition H.2 of the Elmrock Estates Comprehensive Permit Decision for Grafton ZBA Case #827. Condition H.2 addresses surety associated with construction-phase erosion control, site stabilization and interim stormwater management. GEI believes this estimate can also address Special Condition #14 in Exhibit 'A' of the Grafton Conservation Commission's Order of Conditions, MassDEP File #164-0956. This estimate supersedes our previous Erosion Control, Site Stabilization & Interim Stormwater Management construction budget dated July 3, 2019.

Please find attached the point-by-point items of the construction budget based upon the following:

- GEI referred to construction plans dated August 30, 2016 and last revised December 10, 2018. Said plans were endorsed by the Grafton Zoning Board of Appeals.
- This budget does not reflect construction costs associated with the site infrastructure.
- The seeding for erosion control was calculated from the following:
 - Lots 11 22 have been recently developed and do not have established vegetative cover yet.
 - There are steep slopes along the rear (western side) of Lots 26 and 25 that may need to be reseeded to establish sufficient vegetative cover.
- The road has been paved and work is occurring at the south end of the site. The cost for a stabilized construction entrance has been removed from the estimate.
- GEI has also added a line item "Reestablish Temp. Eroslon Control Barriers" to the
 construction budget. This line item was added because during the development of Lots
 13 and 14 the intermittent erosion control barriers were removed. To protect Infiltration
 Basin 2 from erosion and sedimentation, the intermittent erosion control barrier should
 be re-established.

- GEI has also added a note "[1]" to the "Erosion Control Barriers, Maintain" line item.
 The note states that the maintenance of the erosion control barriers is covered under GEI's Site Development/Subdivision Construction Budget dated August 31, 2020.
- There has been a 20% administration and contingency added to the budget's subtotal for inspections, contract administration and inflation.

The purpose of our construction budget is to provide the Grafton Zoning Board of Appeals with an "engineer's opinion" of the possible construction value for the work identified herein. This budget is based upon typical municipally-bid public works projects subject to state wage rates. We use state wage rates as the municipality will be required to pay prevailing state wage rates should the municipality ultimately become responsible for contracting construction activities. The rates indicated within this estimate reflect current market conditions.

If you have any questions or comments concerning this estimate, please feel free to contact our office.

Very truly yours,

Graves Engineering, Inc.

Jeff ey M. Walsh, P.E.

Principal

Attachments:

Engineer's Opinion Construction Budget

cc: Christopher McGoldrick, Grafton Town Planner

Grafton Conservation Commission Stephen O'Connell; Eastland Partners



100 GROVE ST. | WORCESTER, MA 01605

EROSION CONTROL, SITE STABILIZATION AND INTERIM STORMWATER MANAGEMENT **ENGINEER'S OPINION CONSTRUCTION BUDGET**

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PROJECT: ELMROCK ESTATES, WHEELER ROAD

DATE: April 6, 2021

The following construction budget is based upon plans last revised: This estimate is based upon site visits performed through:

12/10/18 03/29/21

	UNITS	\$/UNIT	COST E	STIMATE	Neve
DICUT OF WAY	OMITS	PINIOIE	QUANTITY	VALUE	Notes
RIGHT OF WAY				300	A 100 A 100 A
Erosion Control Barriers, Maintain	Lin. Ft.	\$3.00	0	\$0.00	[1]
Reestablish Temp. Erosion Control Barriers	Lin. Ft.	\$8.00	210	\$1,680.00	
Stabilized Construction Entrance	Allow	\$1,500.00	0	\$0.00	
Temporary Settling Basins, Excavation	Cu. Yds.	\$6.00	0	\$0.00	
Rip-Rap (for spillways)	Sq. Yds.	\$30.00	0	\$0.00	
Rehandle and Spread Stockpiled Topsoil	Sq. Yds.	\$3.00	200	\$600.00	
Seeding for Erosion Control	Sq. Yds.	\$1.10	20,000	\$22,000.00	
		Subtotal:		£04.000.00	
200/	0			\$24,280.00	
20% Contingency/Inflation:			\$4,856.00		
		TOTAL:		\$29,136.00	
	TOTAL	(Rounded):	*	\$29,000.00	

Notes:

^[1] Maintenance of the erosion control barriers is covered under GEI's Site Development/Subdivsion Construction Budget dated August 31, 2020.

^{*} This estimate was prepared to assist the Zoning Board of Appeals with establishing the amount of surety for this project. The surety value established by the Board may vary from this estimate.